

ROCKY FLATS PLANT
ENVIRONMENTAL MANAGEMENT
SITE-WIDE QA PROJECT PLAN

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ENVIRONMENTAL MANAGEMENT
SITE-WIDE QA PROJECT PLAN

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
ARAR	Applicable or Relevant and Appropriate Requirement
ASME	American Society of Mechanical Engineers
CAA	Clean Air Act
CAR	Corrective Action Report
CDH	Colorado Department of Health
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHWA	Colorado Hazardous Waste Act
C-O-C	Chain-of-Custody
CLP	Contract Laboratory Program
DOE	U.S. Department of Energy
DQO	Data quality objectives
EE	Environmental Evaluation
EMAD	Environmental Monitoring and Assessment Division
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FS/CMS	Feasibility Study/Corrective Measures Study
GRRASP	General Radiochemistry and Routine Analytical Services Protocol
HMWM	Colorado Department of Health Hazardous Materials and Waste Management Division
IAG	Federal Facility Agreement and Consent Order (Interagency Agreement)
IHSS	Individual Hazardous Substance Sites
IRA/IM	Interim Remedial Action/Interim Measures

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1.0 QA PROJECT PLAN PURPOSE

The purpose of this Quality Assurance Project Plan (QAPjP) is to identify the Quality Assurance (QA) requirements, and specific measures for implementing these requirements, that are applicable to the quality-affecting investigation and remediation activities at locations on the Rocky Flats Plant (RFP) site. To avoid confusion the acronym QAPjP is used and denotes the Quality Assurance Project Plan (QAPP) defined in the IAG. (Collectively, these activities will be referred to as "environmental restoration" activities.) The locations requiring investigation and potential remediation are identified and agreed to in the "Federal Facility Agreement and Consent Order" referred to as the Interagency Agreement (IAG), dated January 1991, between the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and the Colorado Department of Health (CDH). The level of detail in this QAPjP takes into consideration the potential for environmental releases, potential regulatory concerns, DOE orders, environmental laws, EPA guidance, and public visibility.

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1.0 PURPOSE

This section describes the organization and authority for the development, implementation, and verification of the EM Department QA Program. This section also documents the organizational structure, functional responsibilities, levels of authority, and lines of communication established within the Department to achieve quality work and data.

2.0 ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

Organizational structure and responsibility of assignments have been established to attain the following objectives:

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1.0 QA PROJECT PLAN BASIS

The requirements for developing this site-wide QAPjP are established in the IAG and DOE Orders 5700.6B, Quality Assurance and 5400.1, General Environmental Protection Program.

The IAG requires a quality assurance project plan to be developed based on the EPA guidance for preparing QA project plans contained in EPA/QAMS/005/80, Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans. Precedence for a site-wide QAPjP is established in the NCP. DOE Order 5400.1 establishes environmental protection program requirements for DOE operations. It requires a quality assurance program to be established for environmental programs that is consistent with DOE Order 5700.6B. DOE Order 5700.6B sets forth requirements for establishing, implementing, and maintaining plans and actions to assure quality achievement in DOE Programs. DOE

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1.0 PURPOSE

This section defines the requirements and methods for the control of procurement documents associated with the purchase of items or services which would be expected to have a substantial impact on the quality of data used in support of environmental restoration activities.

2.0 APPLICABILITY

These methods are applicable to personnel who are involved with the procurement of items or services for environmental restoration activities. Procurement practices will be controlled by existing EG&G procurement guidelines.

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1.0 PURPOSE

This section establishes the requirements and methods by which EM Department instructions, procedures, and drawings are prepared, reviewed, and approved.

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1.0 PURPOSE

This section establishes the requirements and methods of control for the preparation, review, approval, revision to, issuance and distribution of controlled documents.

2.0 APPLICABILITY

This section applies to ER Program controlled documents, including this QAPJP, procedures, SOPs, QAAs, and others as specified by the QAPM. Changes to documents designated as "controlled" shall be subject to the same control requirements as the original document. Document control assures that the most current, approved procedures and guidance documentation are being distributed for use on the ER program.

TITLE: CONTROL OF PURCHASED ITEMS
AND SERVICES

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1.0 PURPOSE

This section establishes the requirements and methods for vendor selection and the control of purchased items and services.

2.0 APPLICABILITY

These requirements apply to EM Department and EM Department-contracted personnel involved in the procurement of items and services for environmental restoration activities which would be expected to have a substantial impact on the data quality used in support of environmental restoration activities.

TITLE: IDENTIFICATION AND CONTROL OF
ITEMS, SAMPLES, AND DATA
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1.0 PURPOSE

This section establishes the requirements and methods for identifying and controlling items, samples, and data that affect quality. These methods are used to assure that only correct and accepted items, samples, and data are collected, used, or installed.

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1.0 CONTROL OF PROCESSES

Criterion 9 of ASME NQA-1 requires the control of special processes that affect quality of items or services. Special processes are defined as processes which are highly dependent on the control of the processes or the skill of the operators, or both, and in which the specified quality cannot be readily determined by inspection or test of the product. The QA/QC controls for the ER activity processes of data collection (sampling), analyses, validation, reduction, assessment, and reporting are discussed in Section 3, Sampling Procedures and Investigations Control, and in the EG&G SOPs listed in Table 3-1. The establishment of acceptance criteria for ER activities is accomplished through the development of DQOs, which are discussed in Section 3 and in Appendix A, Data Quality Objective Development Process.

Other methods for controlling processes which may affect the quality of items and services or the validity of data are an integral part of other sections of this QAPjP, such as Section 4, Procurement Document Control; Section 7, Control of Purchased Items and Services; Section 8, Identification and Control of Items, Samples, and Data; Section 12, Control of Measuring and Test Equipment; and Section 13, Handling, Storage, and Shipping of Samples and Items. Since the control of ER activity processes are addressed in other portions of the QAPjP and in the EG&G SOPs listed in Table 2-1, process control is not discussed further in this section.

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1.0 PURPOSE

This section describes the requirements and methods for performing inspections of quality-affecting items or activities and the requirements for qualification and certification of inspection personnel.

2.0 APPLICABILITY

These requirements are applicable to all EM Department Program personnel and their subcontractors who plan or conduct inspections of items, systems, or components (e.g., inspection of monitoring wells, both materials and installation).

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1.0 PURPOSE

This section describes the requirements and methods for test activities performed to demonstrate that the items and systems will perform satisfactorily.

2.0 APPLICABILITY

This section applies to all EM Department and subcontractor personnel involved in test planning, approval, performance, documentation, evaluation, and disposition of final test results. Examples of tests include prototype qualification tests, bench scale and/or prototype waste treatability tests, production tests, proof tests prior to installation, pre-operational tests,

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1.0 PURPOSE

This section establishes the requirements and the methods for the control of M&TE used in ER Program activities. Specific test equipment required during the conduct of ER Program activities are listed and described in the "Procedures" section of the EG&G SOPs listed in Table 3-1. The controls for analytical laboratory equipment are determined by the method of analysis, which are addressed in the GRRASP.

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1.0 PURPOSE

This section establishes the requirements and methods for the control of packaging, handling, storage, shipping, cleaning, and preservation of items which affect quality. These requirements do not apply to handling of samples, sample chain-of-custody, or data, as these are discussed in Sections 3 and 8 of this QAPjP. The methods discussed in this section ensure that the items which affect quality are controlled to prevent damage or loss and to minimize their deterioration.

The handling, storage, and shipping of hazardous wastes are addressed in RFP RCRA Hazardous and Mixed Waste SOPs. ER Program SOPs that deal with decontamination and handling of potentially contaminated equipment, wash water, drilling fluids and cuttings, and residual core and laboratory samples are part of the EG&G Rocky Flats field operations procedures (specifically SOPs 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, and 1.13).

TITLE: IDENTIFICATION, INSPECTION,
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1.0 PURPOSE

This section identifies the requirements and methods for use of physical status indicators (e.g., tags or markings) for items, products, systems, and equipment that have the potential to impact the quality of samples and/or data. When it is not appropriate to attach physical status indicators to items, products, systems, or equipment, the inspection, test, and operation status shall be recorded in documents (e.g., inspection records) traceable to the particular item.

2.0 APPLICABILITY

These requirements are applicable to EG&G Rocky Flats and subcontractor personnel involved in controlling the status of items products, systems, and equipment and to personnel involved in using these while performing ER Program activities. The type of activities that shall comply with these requirements and methods include, but are not limited to, receiving

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1.0 PURPOSE

This section defines the requirements, and methods for identifying, controlling, evaluating, and dispositioning nonconformances in items, services, samples, and data.

2.0 APPLICABILITY

These requirements are applicable to all personnel who discover, evaluate, and/or provide dispositions to nonconformances. Nonconformances in analytical laboratories are addressed in the GRRASP and are described in Section 3 of this QAPjP.

TITLE: CORRECTIVE ACTION

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1.0 PURPOSE

This section describes the requirements and methods for identifying, documenting, and verifying corrective actions for conditions considered to be adverse to quality.

2.0 APPLICABILITY

These requirements are applicable to personnel involved in identifying corrective actions resulting from performance and system audits, surveillances, assessments, laboratory comparison studies, investigations, NCRs, unplanned events, or other activities.

TITLE: QUALITY ASSURANCE RECORDS

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1.0 PURPOSE

This section establishes the requirements and methods for the generation, control, validation, maintenance, and disposition of QA Records that are a result of ER Program activities.

2.0 APPLICABILITY

These requirements are applicable to activities which generate, process, or verify documents and records supporting quality-affecting activities and site investigations. The terms "records" and

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APPENDIX A

DATA QUALITY OBJECTIVE DEVELOPMENT PROCESS

ENVIRONMENTAL RESTORATION
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APPENDIX B

**Table B1: Analytical Methods, Detection Limits, and
Data Quality Objectives**

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Approved By:

[Signature]
Director, Environmental Management

5/7/91

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APPENDIX C REFERENCES